

REMARKS

This Amendment, submitted in reply to the Office Action dated March 3, 2005, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

As a preliminary matter, the Examiner has withdrawn claims 4-5 pursuant to the Response to Election Requirement of October 20, 2004.

Turning to the merits of the Office Action, claims 1-3 and 6-11 have been examined on the merits. Claims 1-3 and 6-8 and have been rejected under 35 U.S.C. § 103 as being unpatentable over Decker (U.S.P. 6,137,594). Claims 9-11 have been allowed. Applicant respectfully submits the following arguments in traversal of the prior art rejections.

Applicant's invention relates to a color conversion device and method for converting device-dependent image signals into device-independent image signals representing densities with block dyes. An exemplary embodiment of the invention is illustrated by Fig. 2. An input scanner provides R,G,B signals to plural tables 16, 18 and 20 whose outputs are provided to a table selecting calculator 22. The calculator 22 receives block dye density values C', Y', M' from a target generator and selects one of the tables 16, 18, 20 outputting color image signals closest to the target values. The selected table output and set of coefficients Bm are provided to a converter 30, which provides an image signal to color processor 32 for output as C, M, Y, K data.

The Examiner maintains that Decker teaches or suggests each feature of claim 1. The rejection is deficient for at least the following reasons. The Examiner correctly concedes several deficiencies with regard to the disclosure of Decker. First, the Examiner concedes that Decker fails to teach an external CMYK signal as device independent signals. The Examiner contends Decker teaches that any color combination having certain color values ($L^*a^*b^*$) which do not take into account characteristics of the colors of a certain printer is externally defined, and are thus independent of the characteristics of the printer. The Examiner appears to be misreading Decker. Decker teaches conversion between color spaces through a standard device-independent space $L^*a^*b^*$. Col. 6, lines 11-14. The reference to an external "CMYK" space appears to refer to a device-dependent color signal which must then be converted (through $L^*a^*b^*$, for example) to a different color signal $C'M'Y'K'$ that takes into account the output characteristics of another device. However, the original C,M,Y,K signal (while external to the target printer) is still dependent on its associated printer, and therefore is also device-dependent and not device-independent.

As an additional deficiency in Decker, the Examiner correctly concedes that Decker does not teach device-independent signals representing densities with block dyes. The Examiner then explains that block dyes are well known, and that mixtures in equal amounts of CMY will produce gray levels. Such addition of black dyes are substituted for equal amounts of C, M, Y for overprinting. The Examiner contends that the known characteristics for block dyes, in conjunction with the use of the CMYK data as a device-independent signal thereby teaches each feature of the claims.

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Applicant submits that Decker merely teaches a variation on the substitution of K for a combination of C, M, Y inks. The CMY device-dependent data can be represented by device dependent CMYK. Moreover, the K substitution only relates to representation of the substitution amount of a single dye, rather than multiple block dyes as described by claim 1. Therefore, Decker does not teach each feature of claim 1 for at least these reasons. Claims 2 and 6-7 are patentable for similar reasons.

Claims 3 and 8 are patentable based on their dependency.

With regard to the Examiner's statement on reasons for allowance, Applicant submits that the claims should be deemed allowable based on their respective recitations rather than on the paraphrase of language applied by the Examiner.

Applicant adds new claims 12-14 to describe the color conversion more particularly.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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